

CAST HOT RUNNER MANIFOLD FOR INJECTION MOLDING
APPARATUS

ABSTRACT OF THE DISCLOSURE

The present invention is an injection molding apparatus having a cast manifold. The manifold is made from a cast block and includes at least one pipe and a junction component fixed therein. The junction component has an axial bore having a first end and a second end, and at least one radial bore fluidly connected to the axial bore and having an opening to an outer surface of the junction component. A melt is introduced into the manifold and travels through the radial and axial bores of the junction component and through at least one pipe connected thereto to an injection molding nozzle for injection into a mold cavity. A manifold of the present invention may have a plurality of pipes and junction components to form a branched multi-level cast manifold.